

# BEFORE THE FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
Application of BellSouth Corporation,	)	
Pursuant to Section 271 of the	) CC Docket No. 02-3	35
Telecommunications Act of 1996	)	
To Provide In-Region, InterLATA Services	)	
In Georgia and Louisiana	)	

## SUPPLEMENTAL DECLARATION OF ROBERT M. BELL ON BEHALF OF AT&T CORP.

### I. <u>INTRODUCTION AND QUALIFICATIONS</u>

1. My name is Robert M. Bell. I am currently employed by AT&T Labs-Research, where I am a Principal Member of Technical Staff with the Statistics Research Department. As part of AT&T's opening comments in CC Docket No. 01-277, I filed a declaration with the Commission on October 19, 2001. My employment history, current responsibilities and educational background are set forth in that declaration.

#### II. PURPOSE OF DECLARATION

- 2. This declaration should be considered as a supplement to my initial declaration. The purpose of this supplemental declaration is to discuss BellSouth's modifications to the service order accuracy measure that BellSouth references in its latest application, particularly the supplemental affidavit of Alphonso J. Varner ("Varner Supp. Aff.").
- 3. In its latest application, BellSouth touts certain changes to BellSouth's sampling methodology for the Service Order Accuracy measure that were recently implemented.

Varner Supp. Aff. ¶¶63-69. However, BellSouth's supplemental application lacks basic details necessary to assess the statistical validity of the samples obtained by the new methodology. From the face of Mr. Varner's supplemental affidavit, it is unclear whether, in implementing this new methodology, BellSouth actually selected a random sample of orders. If so, Mr. Varner's affidavit fails to reveal whether the samples were stratified by submetric or other factors. Additionally, it is unclear how sample sizes were determined, and the manner in which the specific orders were selected.

- 4. Mr. Varner claims that the new sampling methodology better represents service orders ("SOs"), but he fails to explain how the sampling is done. Varner Supp. Aff. ¶ 65. Are SOs sampled directly, or are LSRs sampled first and SOs sampled within LSRs? If the latter, how did BellSouth select the SO to evaluate? These details are needed to assess the validity of the sample for representing service orders. For example, if BellSouth sampled a random service order from each random sample of LSRs, they would tend to under represent the service orders for LSRs with multiple service orders in assessing service orders that might well be prone to error.
- 5. Central to the data reported beginning in November is the replacement of state-specific results with regional results. This change makes sense only if it is reasonable to assume that the performance level is the same in all nine states. However, data reported in the joint reply affidavit of Stacy, Varner, and Ainsworth cast strong doubt on that assumption. In paragraph 49 of that affidavit, the affiants present a table comparing Service Order Accuracy rates for Georgia with regional rates over the six-month period May-September, 2001. In each of the six months, the Georgia rate fell below the regional rate by 0.9 to 7.4 percentage points. The probability of this happening by chance if the true rates are the same in all states is just

- 0.016. Consequently, reliance on regional data raises the real risk that it will overlook substantially worse performance in certain states—in particular, in Georgia, based on its track record.
- 6. Even if regional data are valid for particular states, the small sample sizes for many of the 24 sub-metric categories raise concern about the validity of disaggregated results. In their discussion of the old Service Order Accuracy results, Stacy, Varner, and Ainsworth caution, "Reports for individual strata (reported as disaggregated products) are instructive but cannot be used as statistically significant indications of the quality of the service orders within that disaggregation." Despite the changes initiated in November, their admonishment about the limitations of disaggregated data remains valid. Notably, several sample sizes declined greatly from November 2001 to December 2001, the most recent month reported in the Monthly State Summaries. In November, there were four submetrics whose sample sizes exceeded 100. In December, all four samples sizes were cut dramatically, by as much as a factor of 4: 140 down to 75; 135 to 35; 200 to 45; and 300 to 100. Mr. Varner's affidavit offers no explanation for why this occurred.
- That would have been detected if Service Order Accuracy had been reported for all non-manual orders. Consider submetrics A.2.25.2.1.1 and A.2.25.2.1.2—Service Order Accuracy for Business lines with less than 10 circuits, Dispatched and Non-Dispatched, respectively—with samples sizes across nine states of 40 and 35, respectively, in December 2001. Inspection of sample sizes reported for the corresponding categories of Order Completion Interval (A.2.1.2.1.1 and A.2.1.2.1.2) for seven states (excluding MS and TN) indicates that the number of orders were at least 600 and 3500, respectively, for those two submetrics.

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8. Based on the samples used, both of the above submetrics met the 95 percent benchmark: BellSouth scored 38 of 40 (95.00%) for A.2.25.2.1.1 and 35 of 35 (100.00%) for A.2.25.2.1.2. Obviously, the former submetric might have failed if all 600 or more orders had been included. More noteworthy, is that the same is true for the latter submetrics, for which the observed performance was perfect. The observed sample for A.2.25.2.1.2 was so small that a one sided 95-percent confidence interval ranges down to 91.8%. That is, even if the overall accuracy rate was 91.8%, there is a 5 percent chance that no errors would be found in a sample of 35 orders. Consequently, the observed data are quite consistent with a compelling failure on the complete universe of orders in December.

I hereby declare under penalty of perjury that the foregoing is true and accurate to the best of my knowledge and belief.

Executed on March 4, 2002

Robert M. Bell